Beaufort

2018 ▾

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

1. System Information

Contact Information

Complete

Water System Name:	Beaufort	PWSID:	04-16-010
Mailing Address:	P.O. Box 390 Beaufort, NC 28516	Ownership:	Municipality
Contact Person:	Donovan Willis	Title:	Public Utilities Director
Phone:	252-723-9497	Cell/Mobile:	--

Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	6,8	10.00 %
Cast Iron	4-10	30.00 %
Ductile Iron	6-10	5.00 %
Galvanized Iron	1.5-2	10.00 %
Polyvinyl Chloride	2-12	45.00 %

What are the estimated total miles of distribution system lines? **47 Miles**
How many feet of distribution lines were replaced during 2018? **0 Feet**
How many feet of new water mains were added during 2018? **0 Feet**
How many meters were replaced in 2018? **57**
How old are the oldest meters in this system? **30 Year(s)**
How many meters for outdoor water use, such as irrigation, are not billed for sewer services? **275**
What is this system's finished water storage capacity? **0.7100 Million Gallons**
Has water pressure been inadequate in any part of the system since last update? *Line breaks that were repaired quickly should not be included.* **No**

Programs

Does this system have a program to work or flush hydrants? **Yes, Annually**
Does this system have a valve exercise program? **No**
Does this system have a cross-connection program? **Yes**
Does this system have a program to replace meters? **Yes**
Does this system have a plumbing retrofit program? **No**
Does this system have an active water conservation public education program? **Yes**
Does this system have a leak detection program? **Yes**

If leak is not visible and/or not easily identified then the Town's utility equipment is designed to detect pipe leaks below ground.

Water Conservation

What type of rate structure is used? **Flat/Fixed, Uniform**
How much reclaimed water does this system use? **0.0000 MGD** For how many connections? **0**
Does this system have an interconnection with another system capable of providing water in an emergency? **Yes**

2. Water Use Information

Service Area

Sub-Basin(s)	% of Service Population	County(s)	% of Service Population
White Oak River (17-1)	100 %	Carteret	100 %

What was the year-round population served in 2018? **4,164**

Has this system acquired another system since last report? No

Water Use by Type

Type of Use	Metered Connections	Metered Average Use (MGD)	Non-Metered Connections	Non-Metered Estimated Use (MGD)
Residential	3,203	0.2656	138	0.0072
Commercial	264	0.0757	13	0.0012
Industrial	20	0.0079	0	0.0000
Institutional	42	0.0167	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0079 MGD

Water Sales

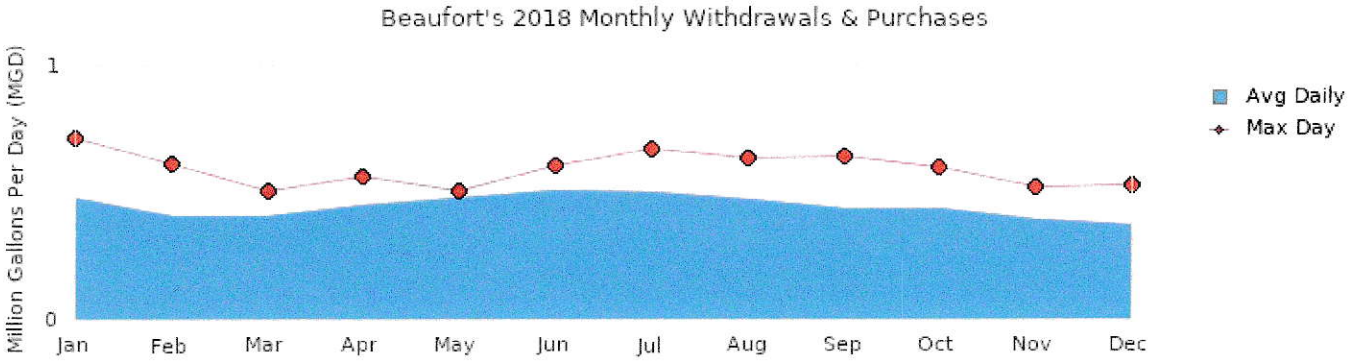
Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
North River/Mill Creek	04-16-197	0.0126	58	0.0000	2050	Yes	No	8	Emergency

Sold water in March and April while North River storage tank was being refurbished.

3. Water Supply Sources

Monthly Withdrawals & Purchases

	Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)
Jan	0.4728	0.7158	May	0.4798	0.5078	Sep	0.4357	0.6441
Feb	0.4068	0.6155	Jun	0.5032	0.6090	Oct	0.4321	0.5991
Mar	0.4056	0.5058	Jul	0.4986	0.6750	Nov	0.3908	0.5186
Apr	0.4487	0.5657	Aug	0.4672	0.6384	Dec	0.3708	0.5305



Ground Water Sources

Name or Number	Average Daily Withdrawal (MGD) MGD	Days Used	Max Day Withdrawal (MGD)	12-Hour Supply (MGD)	CUA Reduction	Year Offline	Use Type
Well #2 - Pine Street	0.1280	365		0.3600	CUA0	2060	Regular
Well #3 - Glenda Drive	0.1070	349		0.3600	CUA0	2060	Regular
Well #4 - Glenda Drive	0.0990	348		0.3780	CUA0	2072	Regular
Well 5 Pine Street	0.1120	357		0.3960	CUA0	2073	Regular

Ground Water Sources (continued)

Name or Number	Well Depth (Feet)	Casing Depth (Feet)	Screen Depth (Feet) Top	Bottom	Well Diameter (Inches)	Pump Intake Depth (Feet)	Metered?
Well #2 - Pine Street	390	110	278	385	10	130	Yes
Well #3 - Glenda Drive	300	160	235	285	10	177	Yes
Well #4 - Glenda Drive	305	100	245	300	12	230	Yes

Well 5 Pine Street	305	100	250	300	12	235	Yes

Are ground water levels monitored? **Yes, Monthly**

Does this system have a wellhead protection program? **Yes**

Water Purchases From Other Systems

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	Contract MGD	Contract Expiration	Contract Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
North River/Mill Creek	04-16-197	0.0142	365		2050	Yes	No	8	Regular

Water Treatment Plants

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Ouput Metered?	Source
Glenda Drive WTP	1.8720	Yes	Yes	Well #3 and #4
Pine Street WTP	1.8720	Yes	Yes	Well #5 and #2

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2018? **No**

If yes, was any water conservation implemented? **No**

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2018? **No**

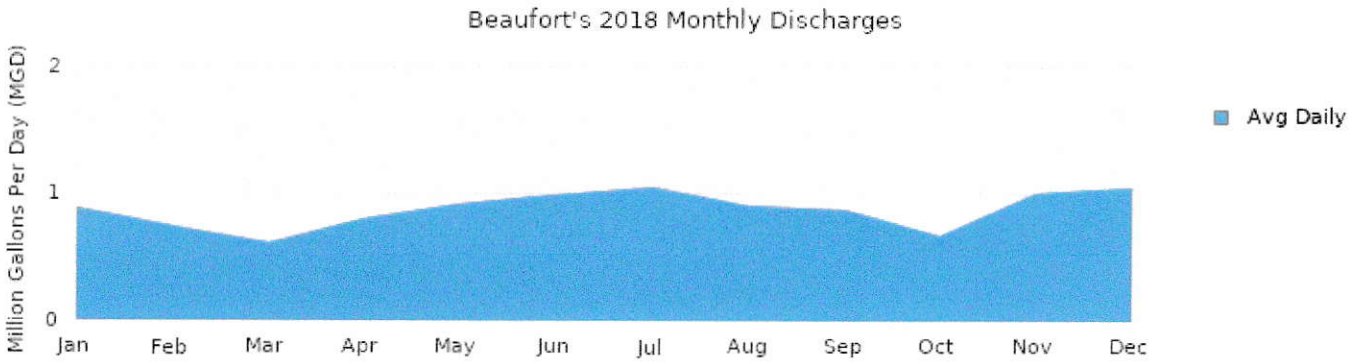
If yes, was any water conservation implemented? **No**

Are peak day demands expected to exceed the water treatment plant capacity in the next 10 years? **No**

4. Wastewater Information

Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	0.8756	May	0.9107	Sep	0.8664
Feb	0.7358	Jun	0.9874	Oct	0.6629
Mar	0.6054	Jul	1.0467	Nov	0.9947
Apr	0.7959	Aug	0.8901	Dec	1.0402



How many sewer connections does this system have? **3,359**

How many water service connections with septic systems does this system have? **22**

Are there plans to build or expand wastewater treatment facilities in the next 10 years? **No**

Wastewater Permits

Permit Number	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)	Receiving Stream	Receiving Basin
NC0021831	1.5000	1.5000	0.8635		Taylor Creek	White Oak River (17-1)
NC0072699	0.6000	0.6000	0.0047		Town Creek	White Oak River (17-1)
NC0072702	0.6000	0.6000	0.0033		Turner Creek	White Oak River (17-1)

5. Planning

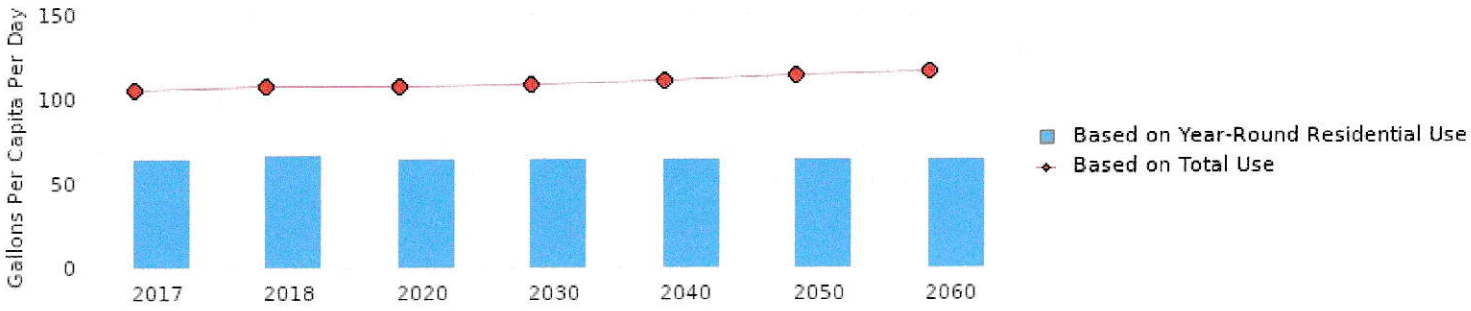
Projections

	2018	2020	2030	2040	2050	2060
Year-Round Population	4,164	4,500	4,815	5,152	5,515	5,900
Seasonal Population	0	4,950	5,296	5,667	6,064	6,488
Residential	0.2728	0.2890	0.3100	0.3300	0.3540	0.3800
Commercial	0.0769	0.1000	0.1100	0.1200	0.1300	0.1400
Industrial	0.0079	0.0080	0.0085	0.0090	0.0095	0.0100
Institutional	0.0167	0.0200	0.0230	0.0250	0.0300	0.0320
System Process	0.0079	0.0270	0.0300	0.0330	0.0360	0.0400
Unaccounted-for	0.0642	0.0380	0.0410	0.0540	0.0670	0.0800

Demand v/s Percent of Supply

	2018	2020	2030	2040	2050	2060
Surface Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ground Water Supply	1.4940	1.4940	1.4940	1.4940	1.4940	1.4940
Purchases	0.0142	0.0142	0.0142	0.0142	0.0142	0.0142
Future Supplies		0.0000	0.0000	0.0000	0.0000	0.0000
Total Available Supply (MGD)	1.5082	1.5082	1.5082	1.5082	1.5082	1.5082
Service Area Demand	0.4464	0.4820	0.5225	0.5710	0.6265	0.6820
Sales	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000
Future Sales		0.0000	0.0000	0.0000	0.0000	0.0000
Total Demand (MGD)	0.4484	0.4820	0.5225	0.5710	0.6265	0.6820
Demand as Percent of Supply	30%	32%	35%	38%	42%	45%

Beaufort's Projected Gallons Per Capita Per Day (GPCD) Over Time



The purpose of the above chart is to show a general indication of how the long-term per capita water demand changes over time. The per capita water demand may actually be different than indicated due to seasonal populations and the accuracy of data submitted. Water systems that have calculated long-term per capita water demand based on a methodology that produces different results may submit their information in the notes field.

Your long-term water demand is 66 gallons per capita per day. What demand management practices do you plan to implement to reduce the per capita water demand (i.e. conduct regular water audits, implement a plumbing retrofit program, employ practices such as rainwater harvesting or reclaimed water)? If these practices are covered elsewhere in your plan, indicate where the practices are discussed here.

Are there other demand management practices you will implement to reduce your future supply needs?

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs?

How does the water system intend to implement the demand management and supply planning components above?

Additional Information

Has this system participated in regional water supply or water use planning? No

What major water supply reports or studies were used for planning?

Please describe any other needs or issues regarding your water supply sources, any water system deficiencies or needed improvements (storage, treatment, etc.) or your ability to meet present and future water needs. Include both quantity and quality considerations, as well as financial, technical, managerial, permitting, and compliance issues:

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